



OPERATOR'S MANUAL

FOURTH HYDRAULIC VALVE KIT

For Cub Cadet Series 3000 Tractor

INSTALLATION INSTRUCTIONS

Service Kit Part Number 759-3971

IMPORTANT:
READ SAFETY RULES AND INSTRUCTIONS CAREFULLY
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WARNING

The tractors which use this Fourth Hydraulic Valve are equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered, or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California, the above is required by law (Section 4442 of the California Public Resources Code). Other States may have similar laws. Federal laws apply to federal lands. A spark arrester muffler is available at your nearest engine authorized service center.

IMPORTANT

SAFE OPERATION PRACTICES



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL—



HEED ITS WARNING.

TO THE OWNER

This manual contains instructions for installation of the Fourth Hydraulic Valve on the Cub Cadet Series 3000 Tractors. Carefully read all sections and study the illustrations and pictures to ensure proper installation.

All optional hydraulic attachments can be operated on the tractor with the installation of Service Kit Part Number 759-3971. When installed, this valve will operate the optional 3 Point Hitch Attachment.

Read and observe all WARNING and CAUTION statements. They are included to provide for the protection of the equipment installer and user, and to ensure the prolonged service life of the equipment.



NOTE

References to LEFT and RIGHT indicate the left and right sides of the tractor when facing forward in the operator's position. Reference to the FRONT indicates the grille end; to the REAR the drawbar end.

CALLING FOR SERVICE

If you are having difficulty assembling this product or if you have any question regarding the operation or maintenance of this equipment, contact your dealer. If you need help locating a dealer in your area, contact the Customer Dealer Referral Line by calling:

1-877-282-8684

SECTION I. COMPONENTS

Before beginning installation of the Fourth Hydraulic Valve Service Kit, remove all parts from the container. Refer to figure 1 to confirm that all parts are present and to acquaint yourself with parts nomenclature.

⇒ NOTE

The parts in figure 1 are referred to throughout the manual by their alphabetic callout.

Contents of Service Kit 759-3971

	Part Number	Description	Qty.
A	603-0963	Template Bracket	1
B	710-1894	Hex Cap Screw 1/4-20 X 7.75 GR5	4
C	721-0492	Back-up O-Ring	5
D	721-3021	O-Ring .301 ID X .070 Dia.	5
E	727-3200	Hydraulic Hose 3 point	1
F	727-3263	Hydraulic Tube (Aux. from Steering)	1
G	727-3264	Hydraulic Hose 3 point	1
H	731-0511	Trim Strip	1
I	731-3259	Lift Handle Knob	1
J	747-3485	Hydraulic Valve Handle #4	1
K	777I20933	Fourth Valve Label	1
L	777X40321	Template Label	1
M	712-0291	Hex Lock Nut 1/4-20	4
		Operator's Manual	1

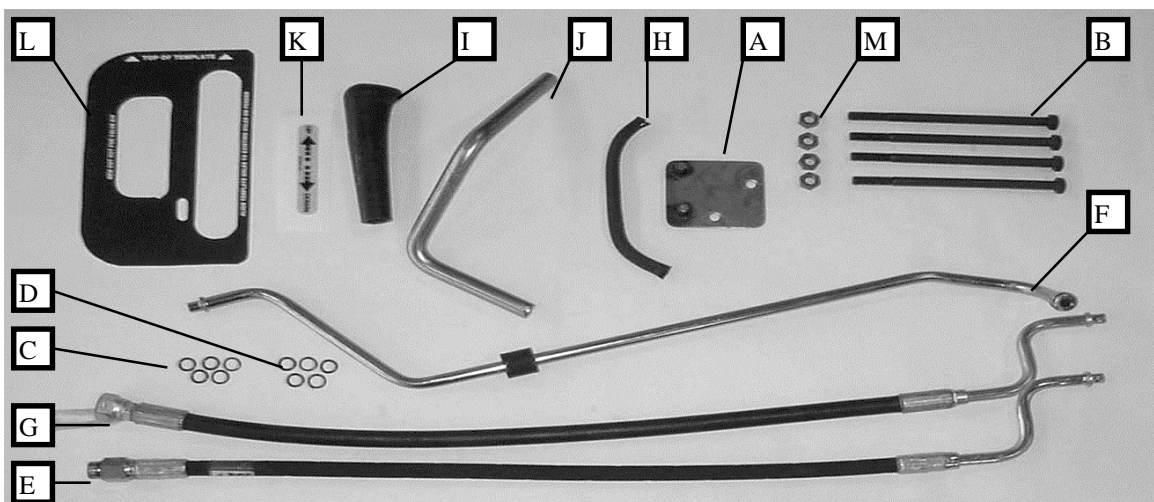


Figure 1

SECTION II. TRACTOR PREPARATION

Follow the instructions in Section II of the optional Front Hitch System Attachment Owner's Manual for preparing the tractor for installation.

SECTION III. INSTALLATION

These instructions describe installation of the Fourth Hydraulic Valve Service Kit after the optional Front Hitch System Attachment and optional Hydraulic Angling Attachment OR optional 3 Point Hitch Attachment has been installed on the tractor. As the Fourth Hydraulic Valve Service Kit is being installed along with the Hydraulic Angling Attachment OR 3 Point Hitch Attachment, refer to the installation instructions in the Operator's Manual that came with all the optional attachments as you complete each of the following steps. Some instructions in one manual may either supersede or supplement instructions in the other.

NOTE: Place a pan beneath the tractor to catch any hydraulic fluid, which may spill during disassembly.

- A) Remove and retain the hex screw and valve clamp securing the hydraulic tube (From Steering Pump to Auxiliary Valve) to the auxiliary valve (Center Lift Valve). See Figure 2.
- B) Remove and retain both bolts securing the steering pump port plate to the steering pump. Pivot the top edge of the port plate backward (toward the left frame rail), bringing the plate to horizontal. Push the port plate up and rotate the port plate counter-clockwise 90 degrees using the main pressure line as the pivot point. Slide the port plate towards the left frame rail until the port plate clears the hydraulic lines. Retain the steering pump port plate. Remove the auxiliary hydraulic tube (From Steering Pump to Auxiliary Valve) and discard. Retain and inspect O-Rings. If damaged, furnish from service parts new O-Rings as needed. See Figure 3.

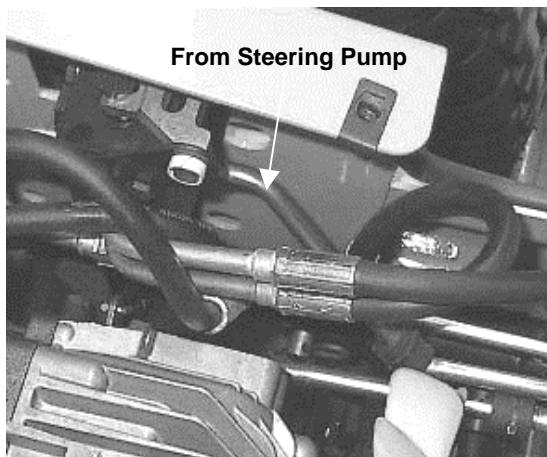


Figure 2

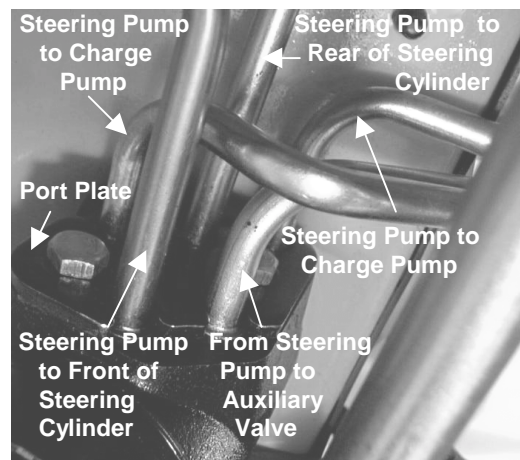


Figure 3

- C) Remove and retain all hardware and valve clamps securing the hydraulic lines and tubes from the valve assembly. Next, disconnect all hydraulic lines and tubes from the valve assembly. Then remove and retain the hex cap screws and lock nut securing the valve assembly to the frame. Set aside the valve assembly when removed.

- D) Take the template bracket (A) from the service kit. Locate the hole in the LH tractor frame, as shown in figure 4, and align the pivot pin on the template bracket (A) with the hole in the frame. Rotate the template bracket (A) counter-clockwise until the second pin on the template bracket (A) contacts the frame. See Figure 5. Hold the bracket in position and use a center punch to mark the center for the two holes. Remove bracket.

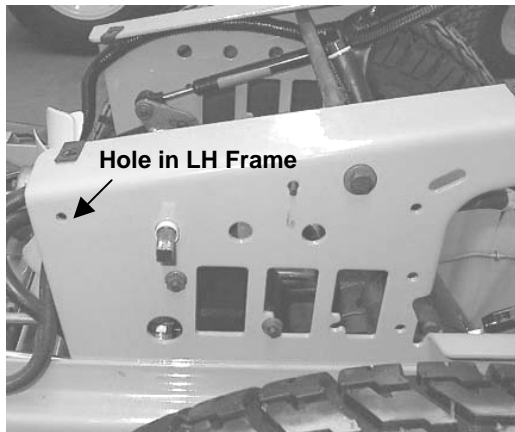


Figure 4

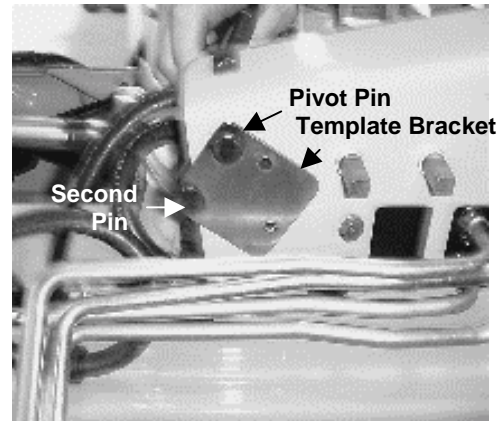


Figure 5

- E) Using a 9/16 inch drill bit, drill the UPPER hole in the frame. Using a 9/32 inch drill bit, drill the LOWER hole in the frame.
- F) Take the valve assembly and note the position of the mounting brackets. Remove and discard the four hex cap screws and four lock nuts fastening the hydraulic valves together. Retain the valve mounting brackets from the valve assembly.
- G) Follow the installation instructions from the Operator's Manual that came with the optional attachments to assemble the valves. Refer to the picture in figure 6 to verify proper assembly. If existing O-rings were damaged during disassembly, use the Back-up O-rings (C) and O-rings (D) from the service kit. Use the four 1/4 inch Hex Cap Screws (B) and four 1/4 Hex Lock Nuts (M) from the service kit to assemble the four valves together along with the mounting brackets previously removed.

NOTE: Install the fourth valve body (use valve from the optional attachment) **IN FRONT** of the center lift valve with the outlet ports of the valve body facing inward. Install the front hitch valve and angling valve with the outlet ports of the valve body facing outward.

IMPORTANT: The spool must be correctly positioned in the valve body to ensure proper operation of the valve. All four valves must have the arrow on top of the valve spool pointing to the rear of the tractor when installed into the chassis.

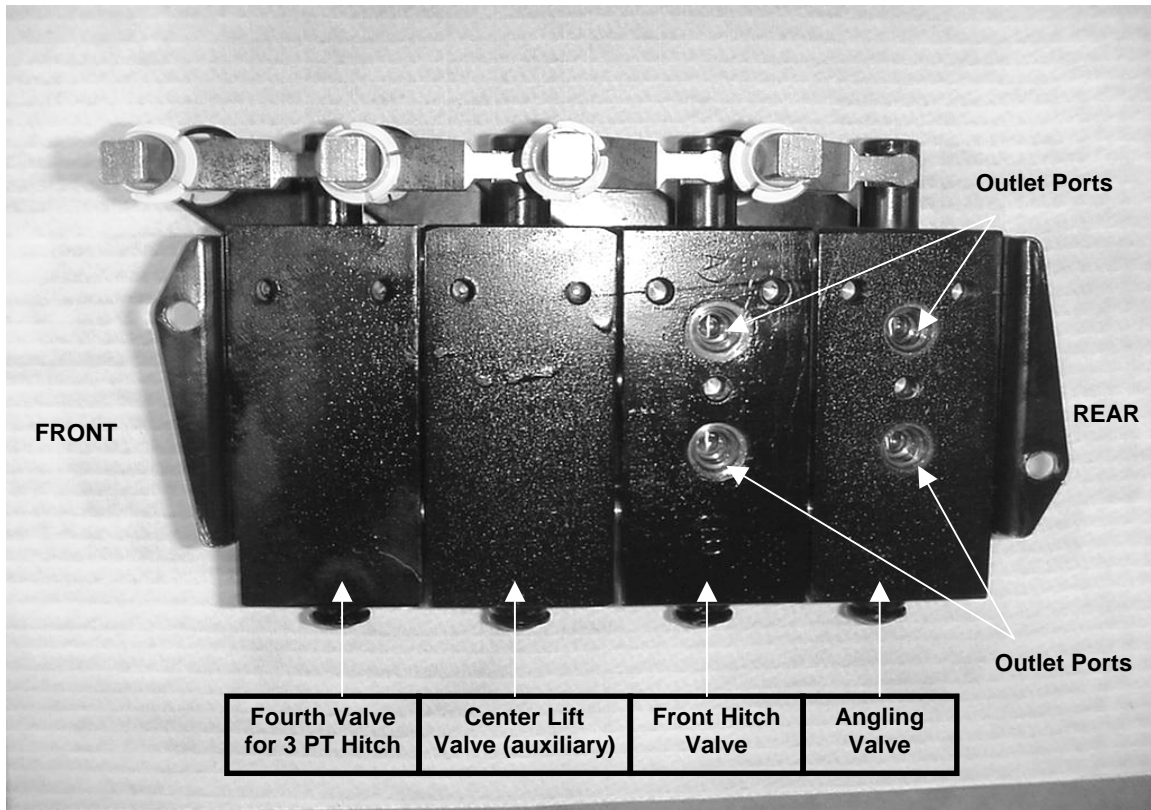


FIGURE 6

- H) Install the valve assembly into the frame and loosely fasten with the previous removed hardware. Follow the installation instructions in the Owner's Manual that came with the Front Hitch System Attachment and Hydraulic Angling Attachment for installing the hydraulic lines/tubes and securing the valve assembly to the frame. See Figure 7 and 8.
- I) If not already installed, install previously removed O-Rings on the ends of the new hydraulic tube (F) (Aux. from Steering). Reassemble in reverse order using instructions in steps B and A. NOTE: When installing the steering pump port plate, place a small amount of grease on the O-Rings and cover the connector surface completely for reinstallation.

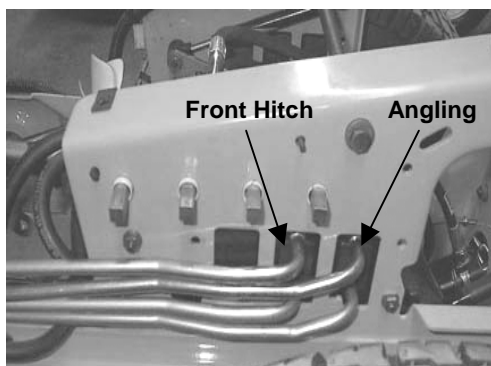


FIGURE 7

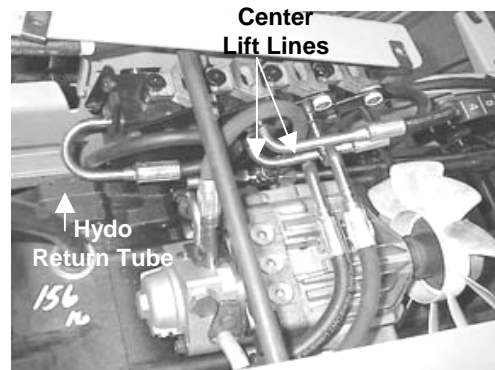


FIGURE 8

- J) Discard both hydraulic hoses for the hydraulic lift cylinder provided with the 3 Point Hitch Attachment and replace with the two hydraulic hoses (E) (G) provided in this service kit. Place an O-Ring (D) and backup O-Ring (C) onto each hose ends. Install the ends of the two hydraulic hoses (E) (G) into the ports of the fourth valve located in front of the center lift valve. See Figure 9.

NOTE: For hose routing, refer to the installation instruction in the Owner's Manual for the 3 Point Hitch Attachment.

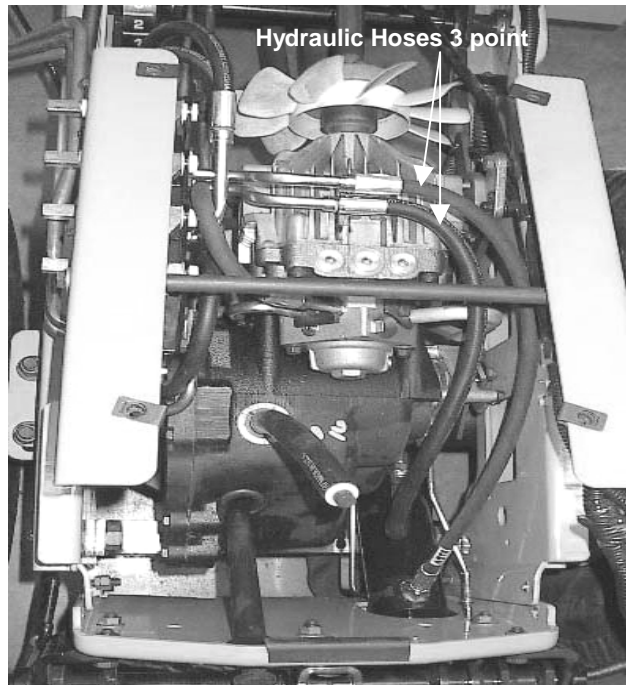


FIGURE 9

- K) Remove and retain the lift lever cover/cup holder and flap from the fender. Take the template label (L) from the service kit and position it on the fender as described on the label. Fasten the template label (L) to the fender and mark the hole location as instructed on the label. See Figure 10. Carefully cut out the hole in the fender using the most convenient method available to you (ie sabre saw, hole saw, etc.). Discard the template and remove any sharp edges. Touch up the paint finish to prevent rusting. See Figure 11.



FIGURE 10



FIGURE 11

- L) Take the push-on trim strip (H) from the service kit and position the strip around the new hole in the fender. Press into place as shown in figure 12 and remove any excess material as needed.



FIGURE 13

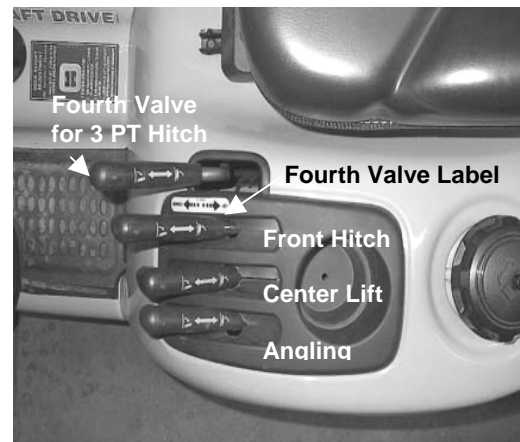


FIGURE 14

- M) Install the lift lever cover/cup holder into the fender. Affix the fourth valve label (K), as shown in figure 14, to indicate lift/lower function of the valve handle for the 3 Point Hitch.
- N) Install the lift handle knob (I) on the hydraulic valve handle #4 (J).
- O) Refer to the installation instructions in the Operator's Manual that came with all the optional attachments to reassemble tractor. Some of the instructions in one manual may duplicate, supersede or supplement instructions in the other.
- P) Install the hydraulic valve handles in the appropriate slots. See Figure 14.
- Q) Refer to the instructions in the Owner's Manuals to check for proper operation.

